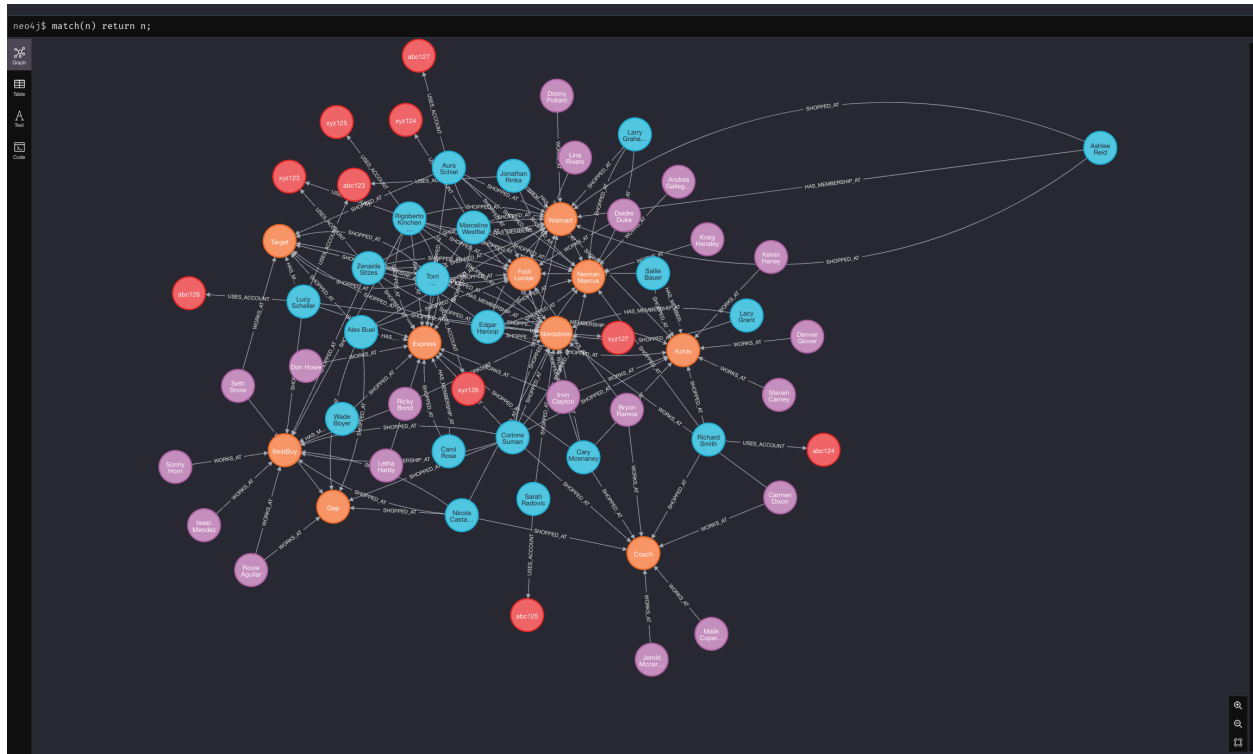
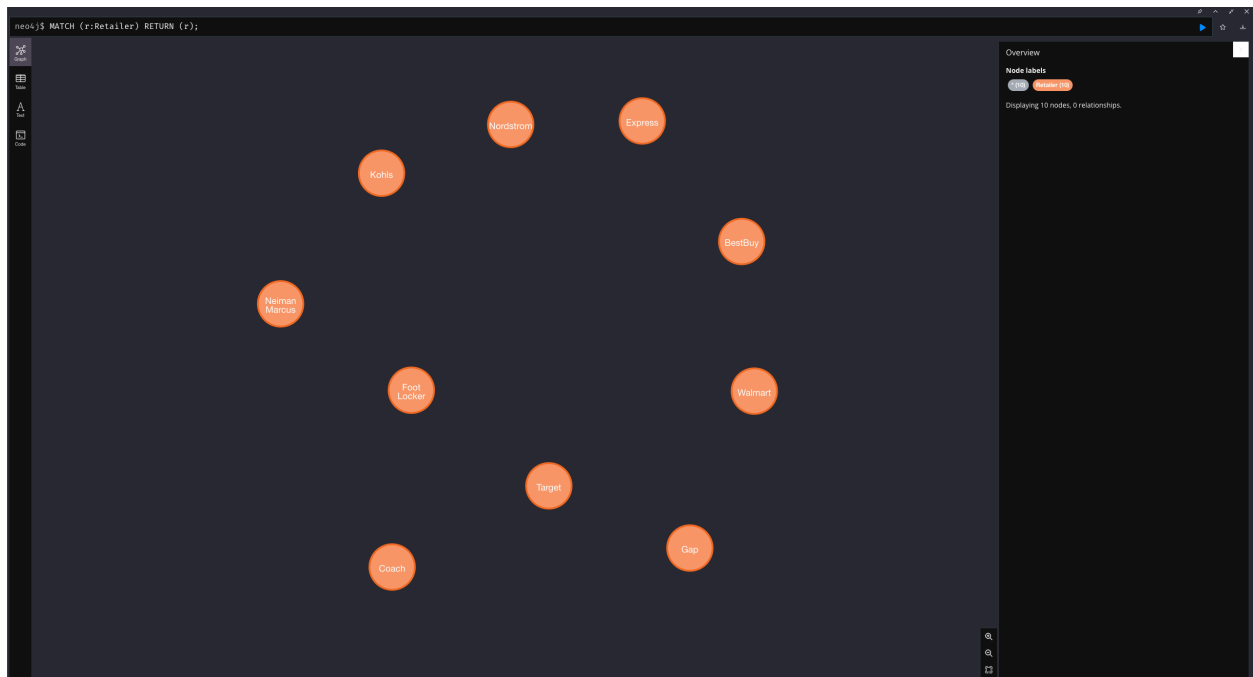


Nakul Patel Exercise 5

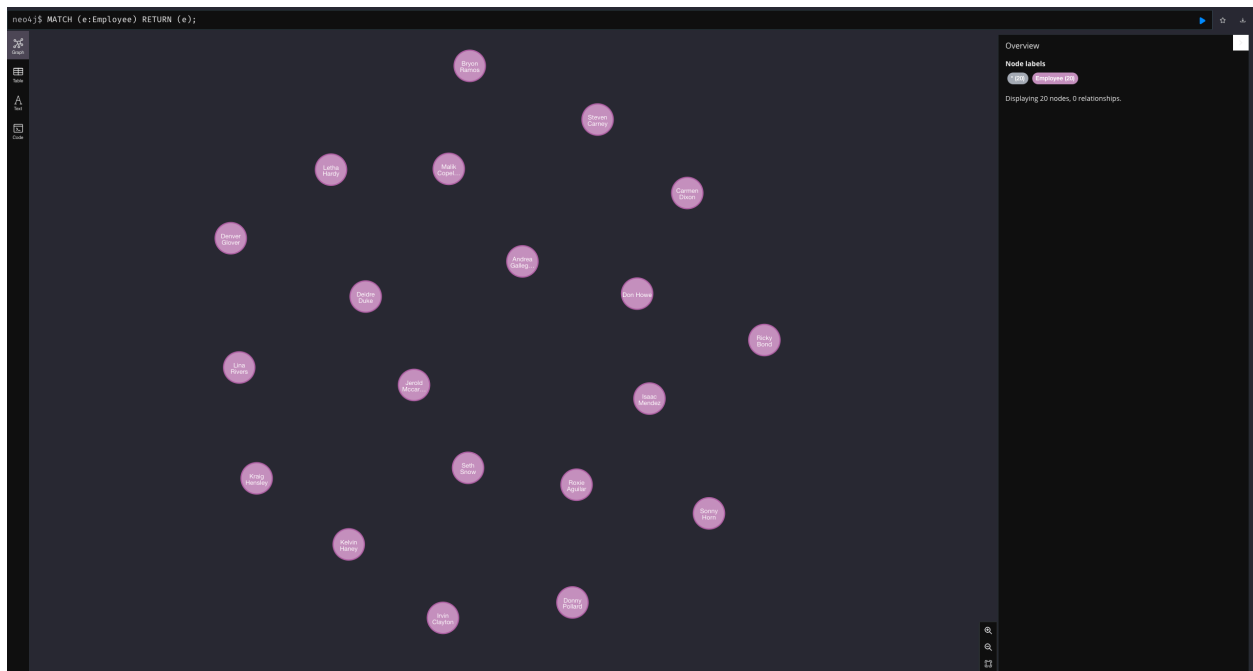
Question 1



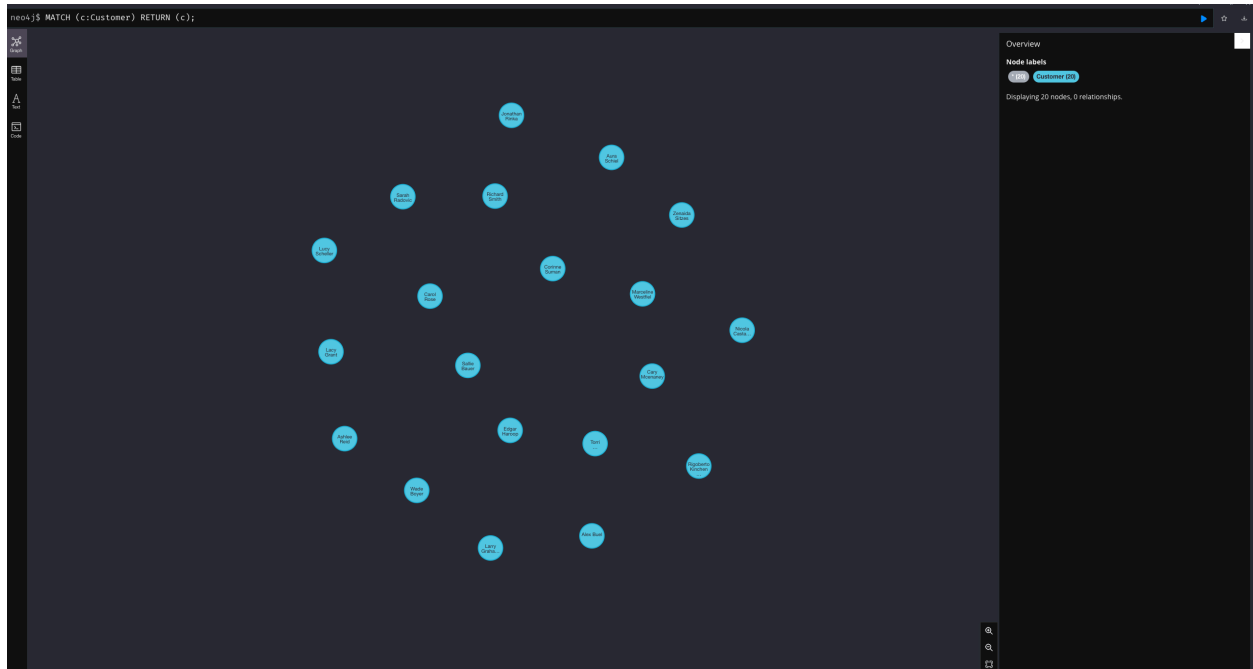
Question 2



Question 3



Question 4



Question 5

```
1 MATCH (customer:Customer)-[transaction:SHOPPED_AT]->(retailer) WHERE transaction.status = "Disputed"
2 RETURN customer.name AS 'Customer Name', retailer.name AS 'Retailer Name', transaction.amount AS 'Transaction Amount',
3 transaction.date AS 'Transaction date'
4 ORDER BY 'Transaction date' DESC;
```

	Customer Name	Retailer Name	Transaction Amount	Transaction date
1	"Nicola Castanon "	"Coach"	"721"	"7/17/2020"
2	"Zanaida Stiles "	"Express"	"1884"	"5/7/2020"
3	"Marceline Westfield "	"Express"	"533"	"5/6/2020"
4	"Edgar Haroop"	"Neiman Marcus"	"1732"	"5/26/2020"
5	"Edgar Haroop"	"Kohls"	"1021"	"5/23/2020"
6	"Lucy Scheller"	"BestBuy"	"424"	"5/20/2020"
7	"Larry Graham"	"Walmart"	"425"	"5/19/2020"
8	"Larry Graham"	"Neiman Marcus"	"475"	"5/19/2020"
9	"Richard Smith"	"Kohls"	"875"	"5/13/2020"
10	"Rigoberto Kinchen "	"BestBuy"	"424"	"5/10/2020"
11	"Jonathan Rinka"	"Neiman Marcus"	"375"	"4/19/2020"
12	"Tori Pettway "	"Foot Locker"	"62"	"4/17/2020"
13	"Carol Rose"	"Express"	"721"	"4/13/2020"
14	"Edgar Haroop"	"Nordstrom"	"1418"	"4/1/2020"
15	"Rigoberto Kinchen "	"Express"	"721"	"4/1/2020"
16	"Edgar Haroop"	"Walmart"	"654"	"3/20/2020"
17	"Rigoberto Kinchen "	"Walmart"	"914"	"3/18/2020"
18	"Zanaida Stiles "	"Walmart"	"1149"	"3/18/2020"

Started streaming 32 records after 7 ms and completed after 8 ms.

Question 6

```
neo4j$ MATCH (customer:Customer)-[transaction:SHOPPED_AT]->(retailer) WHERE transaction.status = "Disputed" RETURN retailer.name as retailer, count(*) as disputed_transactions
```

retailer	disputed_transactions
"Walmart"	7
"Nordstrom"	6
"Neiman Marcus"	4
"Kohls"	4
"Foot Locker"	2
"Target"	1
"Express"	4
"BestBuy"	3
"Coach"	2

Question 7

```
neo4j$ MATCH (customer:Customer)-[transaction:SHOPPED_AT]->(retailer) WHERE transaction.status = "Disputed" RETURN retailer.name as retailer, collect(customer.name), count(*) as disputed_transactions
```

retailer	collect(customer.name)	disputed_transactions
"Walmart"	["Edgar Haroop", "Edgar Haroop", "Rigoberto Kinchen", "Zanaida Stiles", "Jonathan Rinka", "Ashlee Reed", "Larry Graham"]	7
"Nordstrom"	["Edgar Haroop", "Rigoberto Kinchen", "Zanaida Stiles", "Corinne Suman", "Sarah Radovic", "Lucy Grant"]	6
"Neiman Marcus"	["Edgar Haroop", "Aur Schel", "Jonathan Rinka", "Larry Graham"]	4
"Kohls"	["Edgar Haroop", "Cary Monahan", "Jonathan Rinka", "Richard Smith"]	4
"Foot Locker"	["Tori Pettway", "Satie Bauer"]	2
"Target"	["Tori Pettway"]	1
"Express"	["Rigoberto Kinchen", "Marceline Westfield", "Zanaida Stiles", "Carol Rose"]	4
"BestBuy"	["Rigoberto Kinchen", "Zanaida Stiles", "Lucy Scheller"]	3
"Coach"	["Nicola Castanon", "Richard Smith"]	2

Question 8

```
neo4j$ MATCH (customer:Customer)-[transaction:SHOPPED_AT]-(retailer) WHERE transaction.status = "Disputed" RETURN customer.name as customer, count(*) as disputed_transactions
```

	customer	disputed_transactions
1	"Edgar Harrop"	5
2	"Tom Pathway"	2
3	"Rigoberto Kinchen"	4
4	"Cary McManisley"	1
5	"Nicola Castanon"	1
6	"Marceline Westfield"	1
7	"Zenada Stiles"	4
8	"Ara Schel"	1
9	"Corinne Suman"	1
10	"Jonathan Rikus"	3
11	"Richard Smith"	2
12	"Sarah Radovic"	1
13	"Lucy Scheller"	1
14	"Carol Rose"	1
15	"Lucy Grant"	1
16	"Ashlee Reed"	1
17	"Sally Bauer"	1
18	"Larry Graham"	2

Question 9

```
neo4j$ MATCH (customer:Customer)-[transaction:SHOPPED_AT]-(retailer) WHERE transaction.status = "Disputed" AND retailer.street =~ '.*LaSalle.*' RETURN retailer.name as retailer, count(*) as disputed_transactions ORDER BY retailer.name ASC
```

	retailer	disputed_transactions
1	"Neiman Marcus"	4
2	"Nordstrom"	6

Started streaming 2 records in less than 1 ms and completed after 1 ms.

Question 10

```
1 MATCH (employee:Employee)-[employment:WORKS_AT]-(retailer:Retailer)-[transaction:SHOPPED_AT]-(customer:Customer) WHERE transaction.status = "Disputed"
2 WITH employee, collect(DISTINCT retailer) as retailers
3 WHERE SIZE(retailers) > 1
4 RETURN employee.name
```

	employee.name
1	"Ricky Bond"
2	"Irvin Clayton"
3	"Carmen Dixon"
4	"Bryon Ramos"

Started streaming 4 records after 1 ms and completed after 2 ms.